This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) Method for the sequential production of partial proteomes from the complete proteome of a cell preparation, characterised by the following method steps:

a) provision of a sample containing a cell preparation

b) extraction of the cytosolic proteins and the membrane/organelle proteins from the sample provided in step a), leaving a cell nucleus preparation

c) extraction of the proteins from the cell nucleus interior from the cell nucleus preparation obtained in step b) by treatment with an extraction buffer having a pH of between 6.5 and 8 which comprises at least the following constituents:

- in total from 0.1 to 7 per cent by weight of one or more nonionic detergents
- in total from 0.05 to 3 per cent by weight of one or more cholic acid derivatives
- one or more salts from the group consisting of the alkali metal and/or ammonium salts in a total concentration of between 75 and 500 mmol/l,

where detergent-resistant proteins of the cytoskeleton and of the nuclear matrix are not extracted to a significant extent together with the proteins from the cell nucleus interior, but instead remain in the extraction residue.

2. (Original) Method according to Claim 1, characterised in that the extraction buffer employed in step c) additionally comprises a nuclease.

3. (Currently Amended) Method according to claim 1 ~~one of Claims 1 and 2~~, characterised in that the extraction buffer employed in step c) comprises polyoxyethylene sorbitan monopalmitate as nonionic detergent, deoxycholate as cholic acid derivative and NaCl as alkali metal salt.

4. (Currently Amended) Method according to claim 1 ~~one or more of Claims 1 to 3~~, characterised in that the extraction of the cytosolic proteins and the membrane/organelle proteins in step b) is carried out by:

b i) extraction of the cytosolic proteins from the sample provided in step a) by selective permeabilisation of the plasma membrane without significantly impairing the integrity of the subcellular membrane/ organelle structures, the cell nucleus and the cytoskeleton.

b ii) extraction of the membrane/organelle proteins from the part of the sample remaining after the extraction in step b i) with retention of the structural integrity of cell nucleus and cytoskeleton.

5. (Currently Amended) Method according to claim 1 ~~one or more of Claims 1 to 4~~, characterised in that the proteins of the detergent-resistant cytoskeleton and of the nuclear matrix are, in an additional method step d), extracted as a further partial proteome from the extraction residue remaining in step c).

6. (Original) Protein extraction kit at least containing an extraction buffer having a pH of between 6.5 and 8 which comprises at least the following constituents:

- in total from 0.1 to 7 per cent by weight of one or more nonionic detergents
- in total from 0.05 to 3 per cent by weight of one or more cholic acid derivatives
- one or more salts from the group consisting of the ammonium and/or alkali metal salts in a total concentration of between 75 and 500 mmol/l.

7. (Original) Kit according to Claim 6, additionally containing a nuclease.

8. (Currently Amended) Kit according to claim 6 ~~one of Claims 6 and 7~~, additionally containing buffer for extraction of the cytosolic proteins and/or the membrane/organelle proteins from cell preparations and a buffer for extraction of the proteins of the detergent-resistant cytoskeleton and of the nuclear matrix.